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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,978

Applicant(s)

JOHNSON ET AL.

Examiner

Victor Lesniewski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This application has been examined.
2. Claims 1-8 are now pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, and 4-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Linden et al. (U.S. Patent Number 6,266,649), hereinafter referred to as Linden.

5. Linden has disclosed:

- <Claim 1>

A method of providing organized recommendations and or advice to be used in the selection of objects based upon user-supplied profile information, a set of object characteristics, and a set of rules which have been formed by associating a set of variations of the object characteristics with a set of variations of input variables, the method comprising the steps of: (a) assigning a value to represent the relationship between each associated variation of object characteristic and variation of input variable to form a prioritized rule set (column 11, lines 16-26); (b) analyzing the user-supplied profile information to select variations from the set of variations of input variables

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(column 7, lines 20-39); (c) applying the selected input variable variations to the prioritized rule set to obtain a reduced set of prioritized rules (column 11, lines 26-32); and (d) processing the reduced set of prioritized rules to generate categorized output characteristic values which represent the provided organized recommendations and or advice (column 11, lines 35-56).

- <Claim 2>

The method of claim 1 further including the step of selecting objects based upon the provided organized recommendations and or advice (column 15, lines 53-62).

- <Claim 4>

A method of specifying characteristics of objects based upon user-supplied profile information, a set of object characteristics, and a set of rules which have been formed by associating a set of variations of the object characteristics with a set of variations of input variables, the method comprising the steps of: (a) assigning a value to represent the relationship between each associated variation of object characteristic and variation of input variable to form a prioritized rule set (column 11, lines 16-26); (b) analyzing the user-supplied profile information to select variations from the set of variations of input variables (column 7, lines 20-39); (c) applying the selected input variable variations to the prioritized rule set to obtain a reduced set of prioritized rules (column 11, lines 26-32); and (d) processing the reduced set of prioritized rules to generate categorized output characteristic values which represent the specified object characteristics (column 11, lines 35-56).

- <Claim 5>

A method of forming criteria for selecting objects out of an inventory of available objects based upon user-supplied profile information, a set of object characteristics, and a set of rules which have been formed by associating a set of feasible variations of the object characteristics with a set of feasible variations of input variables, the method comprising the steps of: (a) assigning a value to represent the relationship between each associated feasible variation of object characteristic and feasible variation of input variable to form a prioritized rule set (column 11, lines 16-26); (b) assigning a weight to each variation in the set of feasible variations of input variables (column 6, lines 14-25); (c) analyzing the user-supplied profile information to select variations from the set of feasible variations of input variables (column 7, lines 20-39); (d) selecting rules from the prioritized rule set which are associated with the selected input variable variations to form a reduced set of prioritized rules (column 11, lines 26-32); and (e) processing the reduced set of prioritized rules to generate categorized output characteristic values which represent the criteria for selecting objects (column 11, lines 35-56).

- <Claim 6>

A method for selecting objects from an inventory of objects, each object being described by a set of characteristics and by a value for each characteristic in the set of characteristics, wherein for a particular object the assigned values of the characteristics for that particular object are descriptive thereof, the method comprising the steps of (a) forming a set of desired characteristic values (column 14, lines 35-43); (b) creating a branched path search schema as a function of the desired characteristic values, output

characteristic passing criteria, and supplied search order criteria (column 11, line 57 through column 13, line 5 and column 13, line 54 through column 14, line 9); (c) evaluating objects from the inventory of available objects according to the branched path search schema (column 14, line 64 through column 15, line 33); and (d) ranking the evaluated objects according to how well the object traversed the branched path search schema (column 15, lines 34-36).

- <Claim 7>

The method of claim 6 wherein each characteristic in the set of characteristics has a plurality of feasible values, and the step of creating a branched path search schema comprises the steps of (a) placing the characteristics from the set of characteristics in a sequence using the supplied search order criteria (column 14, lines 15-34); and (b) for each of the sequenced characteristics, applying the output characteristic passing criteria to the corresponding values for the sequenced characteristic, whereby characteristic values which do not satisfy the passing criteria are removed from the branched path search schema for that sequenced characteristic (column 15, lines 36-40).

- <Claim 8>

A method for selecting objects out of an inventory of available objects based upon user-supplied profile information, a set of object characteristics, a set of rules, and comprising the steps of: (a) identifying object characteristics and variations thereof and input variables which are related to possible user profile information (column 7, lines 20-39); (b) formulating a set of rules in an n-dimensional array whose indices are the object characteristics and variations thereof and input variables, and whose element values

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represent the relationship between these indices (column 9, lines 34-52); (c) obtaining user profile information (column 10, lines 47-63); (d) applying the user profile information to select a reduced set of input variable indices, which in turn select a reduced set of rules (column 10, line 64 through column 11, line 32); (e) processing the element values from the reduced set of rules to generate categorized output characteristic values (column 11, lines 26-56); (f) generating an individualized branched path search schema as a function of the categorized output characteristic values, output characteristic passing criteria, and supplied search order criteria (column 11, line 57 through column 13, line 5 and column 13, line 54 through column 14, line 9); (g) evaluating objects from the inventory of available objects according to the branched path search schema (column 14, line 64 through column 15, line 33); and (h) ranking the evaluated objects according to how well the object traversed the branched path (column 15, lines 34-36).

Since all the limitations of the invention as set forth in claims 1, 2, and 4-8 were disclosed by Linden, claims 1, 2, and 4-8 are rejected.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Linden, as applied above, in view of Rose (U.S. Patent Number 5,930,769).

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8. Linden disclosed an online recommendations service that recommends items based on various criteria, including a table that uses scores to indicate degrees of similarity between items. In an analogous art, Rose disclosed an online shopping system for fashions that would return to the user a plurality of fashion data based on user selections.

9. Although Linden did not explicitly state that his system could make fashion recommendations, Rose's system is focused on the fashion industry. Rose's system makes fashion recommendations in a multitude of ways. See, inter alia, column 4, lines 26-30 and column 8, lines 58-64. Since the inventions encompass the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Linden by adding the ability to make recommendations on fashion items as provided by Rose. This would make sense because it would aid the users of Linden's system in searching and shopping for more items online than only books, music, or the like.

10. Thereby, the combination of Linden and Rose discloses:

- <Claim 3>

A method of providing fashion recommendations and or advice for selecting garments and accessories (Rose) based upon user-supplied profile information, a set of object characteristics, and a set of rules which have been formed by associating a set of variations of the garment or accessory characteristics with a set of variations of input variables, the method comprising the steps of: (a) assigning a value to represent the relationship between each associated variation of garment or accessory (Rose) characteristic and variation of input variable to form a prioritized rule set (Linden, column 11, lines 16-26); (b) analyzing the user-supplied profile information to select

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variations from the set of variations of input variables (Linden, column 7, lines 20-39); (c) applying the selected input variable variations to the prioritized rule set to obtain a reduced set of prioritized rules (Linden, column 11, lines 26-32); and (d) processing the reduced set of prioritized rules to generate categorized output characteristic values which represent the provided fashion (Rose) recommendations and or advice (Linden, column 11, lines 35-56).

Since the combination of Linden and Rose discloses all of the above limitations, claim 3 is rejected.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Strubbe et al. (U.S. Patent Number 5,469,206) disclosed a method for automatically correlating user preferences with electronic shopping information.
- Greef et al. (U.S. Patent Number 6,032,129) disclosed an electronic commerce software catalog system.
- Rofrano (U.S. Patent Number 6,035,283) disclosed a virtual sales person to guide customers to products that they would be interested in purchasing.
- Aggarwal et al. (U.S. Patent Number 6,356,879) disclosed a system for providing recommendations to customers based on product characterizations and peer group data.
- Hosken (U.S. Patent Number 6,438,579) disclosed a content and collaborative filtering system for recommending items to a user.

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- Pyo (U.S. Patent Number 6,636,836) disclosed a system with multiple recommendation agents.
- Wasfi, Ahmad M. Ahmad, "Collecting User Access Patterns for Building User Profiles and Collaborative Filtering," Proceedings of the 4th International Conference on Intelligent User Interfaces, ACM Press, December 1998, pgs. 57-64, disclosed ways to extract user preferences transparently for online recommender systems.
- Ardissono, L.; Barbero, C.; Goy, A.; and Petrone, G., "An Agent Architecture for Personalized Web Stores," Proceedings of the Third Annual Conference on Autonomous Agents, ACM Press, April 1999, pgs. 182-189, disclosed the architecture of a configurable online store with support for personalized interactions with users.
- Schafer, J. Ben; Konstan, Joseph; and Riedl, John, "Recommender Systems in E-Commerce," Proceedings of the 1st ACM Conference on Electronic Commerce, ACM Press, November 1999, pgs. 158-166, disclosed several examples of recommender systems in electronic commerce.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number currently is 703-308-6165, and beginning October 27 is 571-272-3987. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VL

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Bharat Barot

**BHARAT BAROT
PRIMARY EXAMINER**